

Underground Storage Tank

Remediation Project at

Department of Defense

Housing Facility, Novato, CA

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Presentation • Site Background

- Problem Statement
- Remedial Objectives
- Regulatory Requirements
- Technology Considerations
- Progress Review
- Exit Strategy
- System Expansion
- RAO/LTM/Site Closure



Base Background

- DoD Housing Facility, Novato, California
- Formerly Hamilton Air Force Base
- 25 miles north of San Francisco
- Navy acquired property in 1974
- 554 Acre base adjacent to Hamilton Army Airfield
- 1495 Housing Units for Military Personnel
- Operated by PWC San Francisco Bay
- Closed in September 1996 under BRAC III



Site Background

- Underground Storage Tanks (USTs) and associated piping removed prior to base closure
- PWC Service Station (957): 1-12,000 gal. Gasoline UST
- NEX Service Station (970): 3-10,000 gal. Gasoline USTs, 1-1,000 gal. waste oil UST
- Gasoline release detected in UST excavations adjacent to Buildings 957 and 970

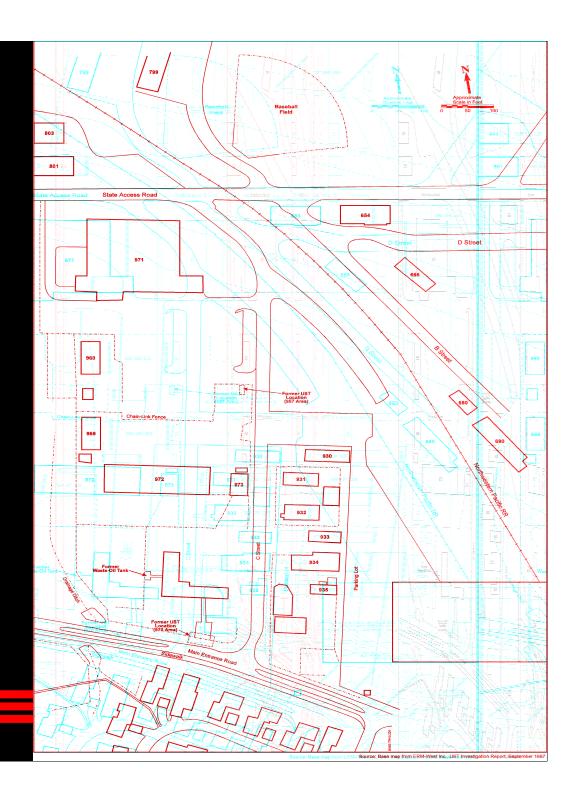


Site Background

- GeoProbe[™] and SCAPS investigations
- Dissolved hydrocarbon plumes commingled
- 9 Groundwater monitoring wells initially installed
- Site map with contours produced for Investigation Report
- Corrective Measures Study evaluated remedial options



Site Map





Site Description

- NEX Service Station (970) area is 350 ft in length; 350 ft in width
- PWC Service Station (957) area is 250 ft in length; 350 ft in width
- Four Buildings on both areas
- Asphalt cover over entire area
- Limited security, No Base sentry
- Fence surrounds both areas
- Nearby Features include Day Care Center, Credit Union,



Problem Statement

- Consider FOST schedule of late 1998
- Consider high interest for reuse of site
 - Public Sale
 - Public Benefit Conveyance (PCB)
 - Future use by Novato school board
 - » Administration offices
 - » School bus yard
 - » Vocational Center



Problem Statement

- Implement acceptable cleanup action to satisfy transfer goals
- Relieve the human health and the environmental concerns
- Relieve Regulatory Agency concerns
- Achieve Site Closure



Remedial Objectives

- Objectives
 Satisfy regulatory criteria
- Focus initial efforts since large site
- Remove sufficient mass to achieve low risk concentrations for TPH/BTEX
- Evaluate methyl tert-butyl ether (MTBE) removal effectiveness
- Implement Remediation by Natural Attenuation (RNA)



Site Closure Approach Risk-Based Approach

- - Cleanup Objectives based on risk to human health and the environment
- Remediation by Natural **Attenuation**



Regulatory Context

- Petroleum Site, CERCLA Exclusion
- Lead Agency: San Francisco Bay Regional Water Quality Control Board (RWQCB)
 - Site evaluated against RWQCB's low risk criteria
 - Potential exposure pathways and receptors dependent on intended future site use



Regulatory Interaction

- BCT Meetings
- RAB Meetings
- Lead Agency (RWQCB)
 - Remedial Investigation Reports
 - Quarterly Monitoring Reports
 - Monthly Technical Reports